1993 ARTICLE INDEX

BASICS

	Month	Page
Basics of active filtering By Dale C. Shackelford	Jan	6
Controlling static at the service bench By Bob West	Sep	6
Gremlins in the power lines By Bob Polk	Nov	12
Multimeter update: Component testing with the DMM, power supply and tracker By Ron C. Johnson	Sep	12
New consumer electronics technology—A special report By The ES&T Staff	Sep	20
Notes about the homemade isolation transformer By R.D. Redden	Sep	48
Practical active filters By Dale Shackelford	Sep	52
Principles of switching power supplies By The ES&T Staff	Sep	19
Restoring scratched compact discs By Matt J. McCullar	Jul	51
Servicing consumer electronics on site By Homer L. Davidson	Feb	11
Setting up a service bench: Build this variable isolation ac power source By Homer L. Davidson	May	10
Special purpose semiconductor diodes By Dale C. Shackelford	Jul	47
Unraveling the parts numbering maze By Vaughn D. Martin	Apr	22
What is CMOS RAM? By David Presnell	Nov	49
Where are they now? By Victor Meeldijk	Feb	21

COMPUTER/MONITOR SERVICING

Tape backups for IBM compatible computers By Sheldon Fingerman	Jun	24
Understanding and troubleshooting personal computers—Parts I, II, and III By John Kull	Jul	6

CONTINUING EDUCATION

Technical training and literature—Knowledge by the pound By Matt J. McCullar	Jul	6
Technical training and literature—Sources of schematics and technical information By Victor Meeldijk	Aug	9
Technical training and literature—Using manufacturers' tech help lines By Sheldon Fingerman	Aug	14

PARTS AND EQUIPMENT PURCHASING

1993 Buyer's Guide By The ES&T Staff	Mar	4
Distributors showcase By The ES&T Staff	Apr	41
Replacement parts showcase By The ES&T Staff	Aug	46
Replacement parts/servicing information sourcebook By The ES&T Staff	Dec	8
Selecting replacement electrolytic capacitors By Ralph W. Muller	Dec	28
Sources of replacement parts By Victor Meeldijk	Dec	18
Sources of technical information By Victor Meeldijk	May	50

SERVICING/TROUBLESHOOTING TECHNIQUES

Applying lateral thinking to troubleshooting By Ron C. Johnson	Sep	58
Setting up a service bench: Heart of the service center By Conrad Persson	May	6
Servicing personal headphone stereos By Sheldon Fingerman	Apr	18
Troubleshooting flat tension mask CRT's—Video circuitry in the ZCM-1492 By John A. Ross	Jan	10
Troubleshooting microwave oven high voltage circuits By Homer L. Davidson	Feb	16
Troubleshooting the Philips S1/S4 chassis By Dale Shackelford	Aug	16
TV power supply troubleshooting By Brian E. Jackson	Jun	48
Understanding compact disc troubleshooting concepts—Part 1 By Marcel R. Rialland	Oct	15
Understanding compact disc troubleshooting concepts—Part 2 By Marcel R. Rialland	Nov	24

SOFTWARE

Computer software for service center management	Feb	6

TOOLS/TEST EQUIPMENT

All about transformers By Homer L. Davidson	Apr	10
Modern scopes for modern circuits By Brian Phelps	Apr	6
Planning the technician's toolkit By Conrad Persson	May	17

1993 ARTICLE INDEX

BASICS

	Month	Page
Basics of active filtering By Dale C. Shackelford	Jan	6
Controlling static at the service bench By Bob West	Sep	6
Gremlins in the power lines By Bob Polk	Nov	12
Multimeter update: Component testing with the DMM, power supply and tracker By Ron C. Johnson	Sep	12
New consumer electronics technology—A special report By The ES&T Staff	Sep	20
Notes about the homemade isolation transformer By R.D. Redden	Sep	48
Practical active filters By Dale Shackelford	Sep	52
Principles of switching power supplies By The ES&T Staff	Sep	19
Restoring scratched compact discs By Matt J. McCullar	Jul	51
Servicing consumer electronics on site By Homer L. Davidson	Feb	11
Setting up a service bench: Build this variable isolation ac power source By Homer L. Davidson	May	10
Special purpose semiconductor diodes By Dale C. Shackelford	Jul	47
Unraveling the parts numbering maze By Vaughn D. Martin	Apr	22
What is CMOS RAM? By David Presnell	Nov	49
Where are they now? By Victor Meeldijk	Feb	21

COMPUTER/MONITOR SERVICING

Tape backups for IBM compatible computers By Sheldon Fingerman	Jun	24
Understanding and troubleshooting personal computers—Parts I, II, and III By John Kull	Jul	6

CONTINUING EDUCATION

Technical training and literature—Knowledge by the pound By Matt J. McCullar	Jul	6
Technical training and literature—Sources of schematics and technical information By Victor Meeldijk	Aug	9
Technical training and literature—Using manufacturers' tech help lines By Sheldon Fingerman	Aug	14

PARTS AND EQUIPMENT PURCHASING

1993 Buyer's Guide By The ES&T Staff	Mar	4
Distributors showcase By The ES&T Staff	Apr	41
Replacement parts showcase By The ES&T Staff	Aug	46
Replacement parts/servicing information sourcebook By The ES&T Staff	Dec	8
Selecting replacement electrolytic capacitors By Ralph W. Muller	Dec	28
Sources of replacement parts By Victor Meeldijk	Dec	18
Sources of technical information By Victor Meeldijk	May	50

SERVICING/TROUBLESHOOTING TECHNIQUES

Applying lateral thinking to troubleshooting By Ron C. Johnson	Sep	58
Setting up a service bench: Heart of the service center By Conrad Persson	May	6
Servicing personal headphone stereos By Sheldon Fingerman	Apr	18
Troubleshooting flat tension mask CRT's—Video circuitry in the ZCM-1492 By John A. Ross	Jan	10
Troubleshooting microwave oven high voltage circuits By Homer L. Davidson	Feb	16
Troubleshooting the Philips S1/S4 chassis By Dale Shackelford	Aug	16
TV power supply troubleshooting By Brian E. Jackson	Jun	48
Understanding compact disc troubleshooting concepts—Part 1 By Marcel R. Rialland	Oct	15
Understanding compact disc troubleshooting concepts—Part 2 By Marcel R. Rialland	Nov	24

SOFTWARE

Computer software for service center management	Feb	6

TOOLS/TEST EQUIPMENT

All about transformers By Homer L. Davidson	Apr	10
Modern scopes for modern circuits By Brian Phelps	Apr	6
Planning the technician's toolkit By Conrad Persson	May	17

Soldering devices
By Sheldon Fingerman Nov 6
Test equipment probes—Part I
By Vaughn D. Martin Oct 6
Test equipment probes—Part 2
By Vaughn Martin Nov 29
Test equipment showcase
By The ES&T Staff Dec 44
Test equipment update: Analog signature analyzers—Part I of three parts
By Vaughn Martin Jun 14
Test equipment update: Analog signature analyzers—Part II
By Vaughn Martin Jul 18
Test equipment update:Analog signature analyzers—Part III
By Vaughn D. Martin Aug 22
Test equipment update: Understanding measurements in horizontal output stages
By Glen Kropuenske Jun 8

TV SERVICING

A primer on color TV
By Vaughn Martin Sep 28
Horizontal output transistor problems
By Homer L. Davidson Nov 16
Servicing an unusual Magnavox TV problem
By Homer Davidson Jun 28
Servicing monochrome televisions
By Dale Shackelford Jun 44
Ten RCA CTC140 chassis symptoms
By Homer Davidson Jul 42
Tuner and control problems
By Homer Davidson Oct 46
Understanding TV horizontal output/deflection circuits
By Glen Kropuenske May 20

VCR SERVICING

CD alignments
By Sheldon Fingerman Oct 23
Inspection, cleaning and lubrication of camcorders
By The ES&T Staff May 47
VCR servicing
By Victor Meeldijk Jun 53

1993 DEPARTMENT INDEX

AUDIO CORNER — Month Page

Better audio through digital compression Jul 58
The Digital pot Jan 23
Digital compact cassette Feb 61
Lightning protection for audio gear Jun 64
More musical instrument amps and other MI equipment Nov 54
Radio broadcast data is here Aug 42
Servicing musical instrument electronics Oct 58
Should you become a sound contractor? Dec 62
Sound advice Sep 66
The "super tuner" Mar 61
Why radio sometimes sounds inferior to CD or tape May 66

BUSINESS CORNER

The SBA goes on-line Jan 44
Using a service form Jul 60
Will Total Quality Management work for you? Aug 44
Will Total Quality Management work for you —Part 2 Sep 61
Will Total Quality Management work for you? —Part 3 Oct 62
Will Total Quality Management work for you? —Part 4 Nov 53
Will Total Quality Management work for you? —Part 5 Dec 43

COMPUTER CORNER

Beware of emulation Jul 57
The CD-ROM primer—the first of a three-part series Apr 28
The CD-ROM primer—part II of a three-part series May 64
The CD-ROM primer—the conclusion of a three-part series Jun 64
CMOS battery failure Oct 56
CMOS battery failure—Part 2 Nov 66
Symptoms of CMOS battery failure—Part 3

VIDEO CORNER

Build this tester for infrared remote control Mar 58
Movable heads drive circuitry Apr 56
On-screen video display technology—Part III Jan 50
Servicing the Hitachi VM series camcorder Nov 60
The unusual Magnavox problem solved Sept 62
Video Update: Setting VCR head switching Feb 50

SUCCESSFUL SERVICING

Diversification in servicing? Feb 46
Pyramid Electronics Jan 47

TECHNOLOGY/TROUBLESHOOTING TIPS

JVC HRD-310U VCR: Noise in the playback picture Feb 55
Mitsubishi model CS-1347R: No audio Jan 54
Z-axis adhesive tape Feb 63

WHAT DO YOU KNOW ABOUT ELECTRONICS?

Constructing a microcomputer—Part II Mar 50
Conversion factors Sep 64
Graphical solutions—Continued Nov 63
More about computer memories Apr 54
More about graphical solutions Dec 55
More about tunnel diodes Jun 59
More on the AM radio detector for IR remotes Feb 56
Sam-Science and Math? Jan 57
Some things to think about Oct 52
The tunnel diode May 58
The tunnel diode oscillator circuit Jul 53